

PUBLICATIONS AND REPORTS

MEETING PAPERS PRESENTED

Field Emission Conference, Linfield College
January 2-4, 1952, McMinnvill, Oregon

- W. B. Nottingham: Quantitative Measurements of Field Emission
from Tungsten Crystals
W. B. Nottingham: The Measurement of High Vacuum

AIEE, Winter Conference
January 21-25, 1952, New York

- S. C. Brown: Physics of Gas Discharge (invited paper)

American Physical Society, Columbia University
January 31-February 2, 1952, New York

- W. P. Allis: Recent Progress in Gaseous Electronics

I. R. E. National Conference
March 3-6, 1952, New York

- J. G. Linvill: Network Alignment Technique

JOURNAL ARTICLES ACCEPTED FOR PUBLICATION

- R. B. Adler: Waves on Inhomogeneous Cylindrical Structures
(Proc. I. R. E.)
J. Brossel, F. Bitter: A New "Double Resonance" Method for
Investigating Atomic Energy Levels. Application to Hg^3P_1
(Phys. Rev.)
W. B. Davenport, Jr., R. A. Johnson, D. Middleton: Statistical
Errors in Measurements on Random Time Functions
(J. Appl. Phys.)
J. T. Eisinger, B. Bederson, B. T. Feld: The Magnetic Moment
of K^{40} and the Hyperfine Structure Anomaly of the Potassium
Isotopes (Phys. Rev.)
L. A. Harris: Axially Symmetric Electron Beam and Magnetic
Field Systems (Proc. I. R. E.)
H. R. Johnson, M. W. P. Strandberg: The Microwave Spectrum
of Ketene (J. Chem. Phys.)
J. G. Linvill: The Approximation with Rational Functions of
Prescribed Magnitude and Phase Characteristics
(Proc. I. R. E.)

JOURNAL ARTICLES ACCEPTED FOR PUBLICATION (continued)

- A. V. Phelps, S. C. Brown: Positive Ions in the Afterglow of a Low-Pressure Helium Discharge (Phys. Rev.)
J. F. Reintjes: An Analog Electronic Correlator (Proc. Nat. Electronics Conf.)

LETTERS TO THE EDITOR ACCEPTED FOR PUBLICATION

- F. Bitter, J. Brossel: An Attempt to Produce Nuclear Orientation in Mercury Vapor (Phys. Rev.)
M. Deutsch, S. C. Brown: Zeeman Effect and Hyperfine Splitting of Positronium (Phys. Rev.)
H. R. Johnson, M. W. P. Strandberg: Beam System for Reduction of Doppler Broadening of a Microwave Absorption Line (Phys. Rev.)

TECHNICAL REPORTS PUBLISHED

(The technical reports listed here may be obtained from the Document Office, 20-B-221, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts)

- No. 116 R. Q. Twiss: Magnetron Theory—I
No. 171 R. R. Moats: Mode Interactions in Magnetron Oscillators
No. 178 L. Weinberg, L. G. Kraft: Experimental Study of Non-linear Devices
No. 185 J. P. Costas: Interference Filtering
No. 214 D. B. Armstrong: Response of Nonlinear Devices to a Pulsed Signal and Gated Noise
No. 215 B. J. Dasher: Synthesis of RC Transfer Functions as Unbalanced Two Terminal-Pair Networks
No. 227 L. Dolansky, M. P. Dolansky: Table of $\log_2 \frac{1}{p}$, $p \cdot \log_2 \frac{1}{p}$ and $p \cdot \log_2 \frac{1}{p} + (1-p) \cdot \log_2 \frac{1}{1-p}$

SPECIAL REPORT

- R. B. Adler, S. J. Fricker: Summary Report on the Flow of Scheduled Air Traffic